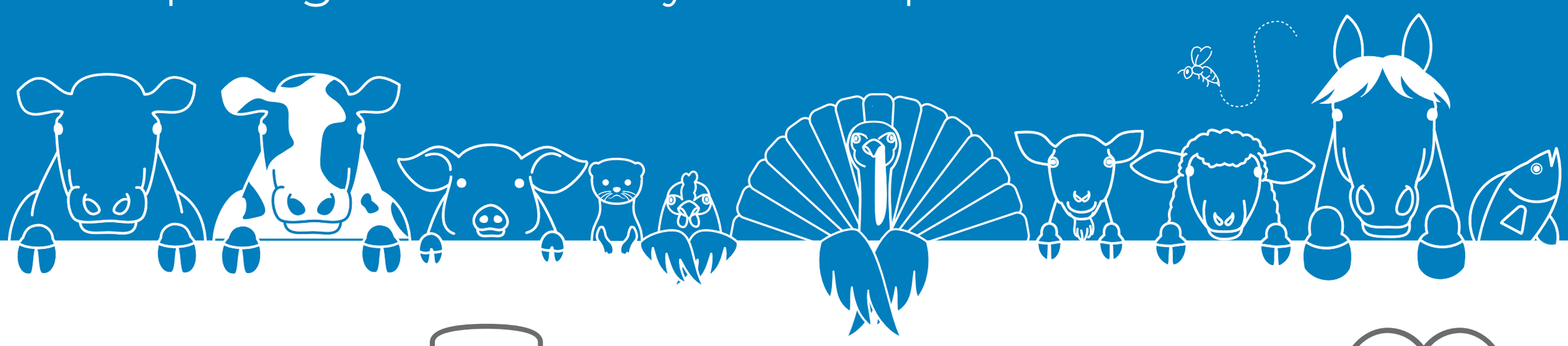
Antimicrobials

Requiring a Veterinary Prescription

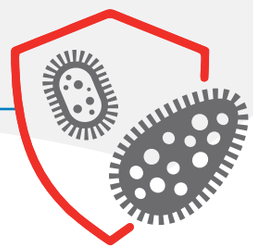
CANADIAN ANIMAL HEALTH INSTITUTE
INSTITUT CANADIEN DE LA SANTÉ ANIMALE



What is an Antimicrobial?

An antimicrobial is a product that kills microorganisms or stops their growth. Antibiotics are a subtype of antimicrobials, along with antifungals, antiparasitics, antiseptics and disinfectants.

Antimicrobial Resistance



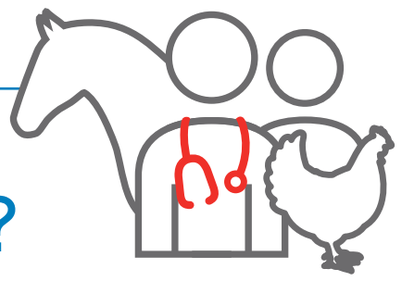
Antimicrobial, or antibiotic, resistance happens when an antimicrobial stops working because the microorganism it is supposed to kill has developed the ability to continue to survive. Antimicrobial resistance is a global One Health issue, impacting animal health as well as human and environmental health.

When bacteria survive and continue to replicate, and an infection does not go away despite treatment with an antimicrobial, resistance can be a cause. Treatment of disease may require the use of a different, more powerful antimicrobial to target these resistant bacteria. However, there are only a limited number of types of antimicrobials available.

Antimicrobials are Important for Animal Health

Safeguarding the effectiveness of antimicrobials is crucially important to maintaining animal health and welfare. Proactively reducing the need for antimicrobial use in herds and flocks is key to preserving the effectiveness of these life-saving medications. This can be done through vaccination programs, good biosecurity, and adopting other good animal husbandry practices. But if an animal gets a serious bacterial infection, only antimicrobials can treat that infection, prevent unnecessary suffering, and hopefully cure the disease.

What is a Veterinarian-Client-Patient Relationship?



The veterinarian-client-patient relationship (VCPR) ensures good veterinary care and is required to be in place before a veterinarian can provide services. This includes prescribing, dispensing or administering veterinary medications, such as antimicrobials. The specific requirements for a VCPR vary by province, but in general terms a veterinarian must have agreed to take on a client and their animals.

Medically Important Antimicrobials

Many of the chemical classes of antimicrobials or antibiotics used to treat animals are also used to treat humans. Medically important antimicrobials are essential for the treatment of serious and life-threatening human infections. If these drugs become ineffective due to the development of bacterial resistance, alternative antimicrobials may not be available. Drugs with limited or no alternatives for the treatment of human infections are considered more medically important than others. In 2018, changes were made by Health Canada, requiring a veterinary prescription to use Category I, II and III medically important antimicrobials in all animal species.

Which Antimicrobials Need a Prescription?

A veterinarian is in the best position to assess your herd or flock's unique needs from a health and welfare standpoint and can recommend the specific product that is best. The following list includes those antimicrobials that need a veterinary prescription. The name of the antimicrobial itself, rather than its brand name, is provided. Talk to your veterinarian about which products may be needed in your herd or flock health management program.

CONTAINS ANTIMICROBIAL
USE RESPONSIBLY

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CVMA ACMV

Category/Antimicrobial Class	Active Ingredient
Category I. Very High Importance	
Cephalosporins – third-generation	Ceftiofur Crystalline Free Acid
	Ceftiofur Hydrochloride
	Ceftiofur Sodium
Fluoroquinolones	Danofloxacin Mesylate
	Enrofloxacin
	Marbofloxacin
Polymyxins	Polymyxin B Sulfate
Category II. High Importance	
Aminoglycosides (except topical agents)	Apramycin Sulfate
	Dihydrostreptomycin Sulfate
	Gentamicin Sulfate
	Streptomycin Sulfate
Cephalosporins – first-generation	Cephapirin Benzathine
	Cephapirin Sodium
Lincosamides	Lincomycin Hydrochloride
	Pirlimycin Hydrochloride
Macrolides	Erythromycin Phosphate
	Gamithromycin
	Tildipirosin
	Tilmicosin
	Tularthromycin
	Tylosin
	Tylosin Phosphate
	Tylosin Tartrate
	Tylvalosin Tartrate
Penicillins	Amoxicillin Trihydrate
	Ampicillin Trihydrate
	Benzylpenicillin Benzathine
	Penicillin G Potassium
	Penicillin G Procaine (Benzylpenicillin Procaine)
Streptogramins	Virginiamycin
Trimethoprim/sulfamethoxazole	Ormetoprim/ Sulfadimethoxine
	Trimethoprim/Sulfonamide
Category III. Medium Importance	
Aminocyclitols	Spectinomycin Sulfate
Aminoglycosides (topical agents)	Neomycin Sulfate
Bacitracins	Bacitracin Methylene Disalicylate
Phenicols	Florfenicol
Sulfonamides	Sulfadiazine Sulfadoxine Sulfamerazine Sulfamethazine Sulfanilamide Sulfathiazole Sulphapyridine
Tetracyclines	Chlortetracycline Calcium Complex
	Chlortetracyline Hydrochloride
	Oxytetracycline
	Oxytetracycline dihydrate
	Oxytetracycline Hydrochloride
	Tetracycline Hydrochloride
Trimethoprim (Diaminopyrimidines)	Ormetoprim
	Trimethoprim
Other Medically Important Antimicrobials – uncategorized but still requiring a prescription	
Coumarins	Novobiocin Sodium
Orthosomycins	Avilamycin
Pleuromutilins	Tiamulin Hydrogen Fumarate

*Note: Active ingredients may be combined in some product formulations.